

ABSTRACT

[0054] An apparatus for controlling the flow of liquid material from a liquid material source to a process chamber is disclosed. The apparatus comprises an injector/vaporizer disposed proximate to the process chamber. The injector/vaporizer includes one or more piezoelectric grids located proximate to a vaporization chamber. The one or more piezoelectric grids function to control the flow of liquid material into the vaporization chamber. Each piezoelectric grid includes interlocking arrays of stripes attached to a frame.